#### PATENT COOPERATION TREATY

#### **PCT**

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Telephone No. (02) 6283 2474	Applicant's or agent's file reference 12557510/MKR/KLL	FOR FURTHER ACTION See Form PCT/IPEA/416				
Int. Cl. Bolf 776 (2006.01) Bolf 8706 (2006.01)  Applicant ADVANCED GRINDING TECHNOLOGIES PTY LIMITED et al  1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.  2. This REPORT consists of a total of \$\psi\$, sheets, including this cover sheet.  3. This report is also accompanied by ANNEXES, comprising:  a. X (sent to the applicant and to the International Bureau) a total of \$8\$ sheets, as follows:  X sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or absets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).  Sheets which superrede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international spilication as filed, as indicated in item 4 of Box No. I and the Supplemental Box Containing a sequence listing and/or table related thereto, in electronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).  4. This report contains indications relating to the following items:  X Box No. II Priority  Box No. IV Lack of unity of invention  X Box No. VI Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement  Box No. VII Certain descurrents cited  Box No. VII Certain descurrents cited  Certain observations on the international application  Date of submission of the demand  16 November 2005  13 January 2006  MATTHEW FRANCIS  Telephone No. (02) 6283 24744	PCT/AU2005/000037	14 January 2005				
Int. Cl. B01F 776 (2006.01) B04E 5712 (2006.01) B09B 3700 (2006.01) B02C 13/06 (2006.01) C02F 1/38 (2006.01)  Applicant ADVANCED GRINDING TECHNOLOGIES PTY LIMITED et al  1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.  2. This REPORT consists of a total of \$\psi\$ sheets, including this cover sheet.  3. This report is also accompanied by ANNEXES, comprising:  a. X (sent to the applicant and to the International Bureau) a total of \$8\$ sheets, as follows:  X sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing receitfactions authorized by this Authority (see Rule 70.16 and Section 677 of the Administrative Instructions).  Sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 40 Box No. I and the Supplemental Box.  b. (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) containing a sequence listing sandor table related thereto, in electronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).  4. This report contains indications relating to the following items:  Box No. II Priority  Box No. II Priority  Box No. II Priority  Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability: citations and explanations rupporting such statement  Box No. VII Certain defects in the international application  Date of submission of the demand  16 November 2005  Box No. VII Certain defects in the international application  Date of submission of the demand  16 November 2005  Box No. VIII Certain defects in the international application  Certain defects in the international app	International Patent Classification (IPC) or r	Littorial classification and IPC				
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Box No. II   Priority	Sequence Listing (see Section 802 o	f the Administrative Instructions)				
Box No. II Priority Box No. II Non-establishment of opinion with regard to novelty, inventive step and industrial applicability Box No. IV Lack of unity of invention X Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement X Box No. VI Certain documents cited Box No. VII Certain defects in the international application Certain observations on the international application  Date of submission of the demand 16 November 2005 Date of submission of the PEAAU AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pt@ipaustralia.gov.au  MATTHEW FRANCIS Telephone No. (02) 6285 3929  Telephone No. (02) 6283 2474		e following items:				
Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability  Box No. IV Lack of unity of invention  X Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement  X Box No. VI Certain documents cited  Box No. VII Certain defects in the international application  Certain observations on the international application  Date of submission of the demand  16 November 2005  Name and mailing address of the IPEA/AU  AUSTRALIAN PATENT OFFICE  PO BOX 200, WODEN ACT 2606, AUSTRALIA  E-mail address: pc@paustralia.gov.au  MATTHEW FRANCIS  Telephone No. (02) 6283 3929  Telephone No. (02) 6283 2474	The state report					
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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement    X		pinion with regard to novelty, inventive step and industrial position it				
Certain documents cited  Box No. VII Certain defects in the international application  Box No. VIII Certain observations on the international application  Certain observations on the international application  Date of submission of the demand  I6 November 2005  Date of completion of this report  13 January 2006  Name and mailing address of the IPEA/AU  AUSTRALIAN PATENT OPFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA  E-mail address: pct@ipaustralia.gov.au  MATTHEW FRANCIS Pacsimile No. (02) 6283 3929  Telephone No. (02) 6283 2474	Lack of unity of invent	on				
Box No. VII Certain defects in the international application  Box No. VIII Certain observations on the international application  Date of submission of the demand  16 November 2005  Name and mailing address of the IPEA/AU  Authorized Officer  AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaustralia.gov.au  MATTHEW FRANCIS Pacsimile No. (02) 6285 3929  Telephone No. (02) 6283 2474	citations and explanatio	ler Article 35(2) with regard to novelty, inventive step or industrial applicability;				
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PO BOX 200, WODEN ACT 2606, AUSTRALIA  E-mail address: pct@ipaustralia.gov.au  MATTHEW FRANCIS  Telephone No. (02) 6283 3929  Telephone No. (02) 6283 2474	AUSTRALIAN PATENT OPERCE	Authorized Officer				
Telephone No. (02) 6283 3929  Telephone No. (02) 6283 2474	PO BOX 200, WODEN ACT 2006 ATTOMATE	1				
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## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

Box No. I Basis of the report	PCT/AU2005/000037
1. V regard to the language, this report is based on:	
The international application in the language in which it was filed	
A translation of the same and t	
A translation of the international application into translation furnished for the purposes of:	which is the land
	, which is the language of a
international search (under Rules 12.3(a) and 23.1 (b))	
publication of the international application (under Rule 12.4(a))	
increasional application (under Rule 12.4(a))	
international preliminary examination (Rules 55.2(a) and/or 55.3(a))  2. With regard to the elements of the	•
2. With regard to the elements of the international application, this report is based on (filed" and are not annexed to this report):  the international application as originally filed/furnished	replacement sheets which have been ferred to in this report as "originally
X the description:	
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pages 1-30 as originally filed/furnished	
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pages" received by this Authority on with the letter of	
pages as originally filed/furnished	
pages* as amended (together with	
pages* as amended (together with any statement) under Ar	rticle 19
pages* 31-38 received by this Authority on 16 November 200 pages* received by this Authority on with the letter of	05 with the letter of 16 November 2005
X the drawings:	
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pages* received by this Authority on with the letter -	•
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a sequence listing and/or any related table(s) - see Supplemental Box Relating to S	
The amendments have resulted in the cancellation of:	bequence Listing.
the description, pages	
the claims, Nos.	
the drawings, sheets/figs	
the sequence listing (specify):	
any table(s) related to the sequence listing (specify):	
This report has been established as if (some of) the amendments annexed to this report made, since they have been considered to go beyond the disclosure as filed, as indicated to go beyond the disclosure as filed to go beyond the go beyond the disclosure as filed to go beyond the disclosure as filed to go beyond the disclosure as filed to go beyond the go beyond th	ort and listed below had not been
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If item 4 applies, some or all of those sheets may be marked "superseded."	ļ

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No. PCT/AU2005/000037

D19: Derwent Abstract Accession No. 2003-595298/56

D20: Derwent Abstract Accession No. 97-200542/18

citations and expla	nations supporting such	ith regard to novelty, inventive step or industrial applical statement
1. Statement		
Novelry (N)	Claims 1-56	YES
Inventive step (IS)	Claims	МО
metitive steb (12)	Claims 1-56	YES
Industrial annuli and the cons	Claims	NO
Industrial applicability (IA)		YES
Citations and explanations (Rule 70.7)	Claims	NO NO
D1: Derwent Abstract Accessi D2: DE 3002429 D3: AU 19540/00 D4: AU 15002/97 D5: DE 3916258	-	D11: DE 20215158 D12: EP 1273341 D13: EP 1208905 D14: US 5538342
D6: Patent Abstracts of Japan, J D7: US 4650343 D8: US 4799595 D9: US 2003/0197080	P 09-066243	D15: Patent Abstracts of Japan, JP 2002-035562 D16: Patent Abstracts of Japan, JP 2002-059144 D17: Patent Abstracts of Japan, JP 2002-282723 D18: Patent Abstracts of Japan, JP 2003-093909

#### Novelty and Inventive Step (Claims 1-65)

D10: US 2002/0064086

Documents D1-D20 disclose various examples of processing apparatus, all of which feature a chamber, and inlet, an outlet and a rotor rotated about a vertical axis. The apparatus of documents D1-D20 are used for a wide variety of purposes, such as milling or grinding, mixing, blending, separation, drying and sterilisation. However, none of the cited art discloses or suggests the combination of features presently claimed. In particular, there is no disclosure of a single rotor of substantially circular gross cross section rotatable at 200kph-1200kph about a vertical axis having features thereon that promote a circulatory flow within the chamber. Hence these claims are considered both novel and inventive.

#### Industrial Applicability (Claims 1-65)

The current claims are directed towards a processing apparatus and therefore have industrial applicability.

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

				PCT/AU2005/000037
Box No. VI Certain docu	ments cited			1-0-11102003/00003/
1. Certain published documen	ts (Rule 70.10)			
Application No. <u>Patent No.</u> WO 2004/067468	Publication date (day/month/year)	. Filing d	(year)	Priority date (valid cl (day/month/year
US 2004/0218464	12 August 2004	26 January	2004	29 January 2003
WO 2004/041442	4 November 2004	2 May 2	003	2 May 2003
DE 10308500	21 May 2004	24 October	2003	4 November 2002
	23 September 2004	26 February	2003	26 February 2003
WO 2004/091797	28 October 2004	16 April 2	004	17 April 2003
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